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L1 ANSWER 1 OF 1 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1997-246368 [23] WPIDS  
 DOC. NO. CPI: C1997-080023  
 TITLE: Mutant serine acetyl transferase enzymes - and  
 recombinant microorganisms for producing O-acetyl serine,  
 L-cysteine or L-cysteine derivatives.  
 DERWENT CLASS: B05 D11 D13 D16 D21 E16  
 INVENTOR(S): HEINRICH, P; LEINFELDER, W  
 PATENT ASSIGNEE(S): (CONE) CONSORTIUM ELEKTROCHEM IND GMBH  
 COUNTRY COUNT: 28  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
DE 19539952	A1	19970430	(199723)*		50	C12N015-54	
WO 9715673	A1	19970501	(199723)	GE	83	C12N015-54	<--
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE							
W: BR CA CN CZ HU JP KR MX PL US							
CZ 9801269	A3	19980715	(199835)			C12N015-54	
EP 858510	A1	19980819	(199837)	GE		C12N015-54	
R: AT BE CH DE DK ES FI FR GB IT LI NL							
CN 1200764	A	19981202	(199916)			C12N015-54	
HU 9900078	A2	19990428	(199924)			C12N015-54	
BR 9610910	A	19990713	(199939)			C12N015-54	
MX 9803317	A1	19980901	(200017)			C12N015-54	
JP 2000504926	W	20000425	(200031)		85	C12N015-09	
KR 99067120	A	19990816	(200045)			C12N015-54	
US 6218168	B1	20010417	(200123)			C12N001-20	
EP 858510	B1	20011219	(200206)	GE		C12N015-54	
R: AT BE CH DE DK ES FI FR GB IT LI NL							
KR 275287	B	20010201	(200210)			C12N015-54	
DE 59608521	G	20020131	(200216)			C12N015-54	
CA 2235752	C	20020416	(200234)	EN		C12N015-54	
ES 2169269	T3	20020701	(200253)			C12N015-54	
JP 3329825	B2	20020930	(200271)		34	C12N015-09	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 19539952	A1	DE 1995-19539952	19951026
WO 9715673	A1	WO 1996-EP4613	19961024
CZ 9801269	A3	WO 1996-EP4613	19961024
		CZ 1998-1269	19961024
EP 858510	A1	EP 1996-937217	19961024
		WO 1996-EP4613	19961024
CN 1200764	A	CN 1996-197894	19961024
HU 9900078	A2	WO 1996-EP4613	19961024
		HU 1999-78	19961024
BR 9610910	A	BR 1996-10910	19961024
		WO 1996-EP4613	19961024
MX 9803317	A1	MX 1998-3317	19980427
JP 2000504926	W	WO 1996-EP4613	19961024
		JP 1997-516282	19961024
KR 99067120	A	WO 1996-EP4613	19961024
		KR 1998-703063	19980427
US 6218168	B1	WO 1996-EP4613	19961024
		US 1998-65104	19980513
EP 858510	B1	EP 1996-937217	19961024
		WO 1996-EP4613	19961024

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KR 275287	B	WO 1996-EP4613	19961024
		KR 1998-703063	19980427
DE 59608521	G	DE 1996-508521	19961024
		EP 1996-937217	19961024
		WO 1996-EP4613	19961024
CA 2235752	C	CA 1996-2235752	19961024
		WO 1996-EP4613	19961024
ES 2169269	T3	EP 1996-937217	19961024
JP 3329825	B2	WO 1996-EP4613	19961024
		JP 1997-516282	19961024

## FILING DETAILS:

PATENT NO	KIND		PATENT NO
CZ 9801269	A3	Based on	WO 9715673
EP 858510	A1	Based on	WO 9715673
HU 9900078	A2	Based on	WO 9715673
BR 9610910	A	Based on	WO 9715673
JP 2000504926	W	Based on	WO 9715673
KR 99067120	A	Based on	WO 9715673
US 6218168	B1	Based on	WO 9715673
EP 858510	B1	Based on	WO 9715673
KR 275287	B	Previous Publ.	KR 99067120
		Based on	WO 9715673
DE 59608521	G	Based on	EP 858510
		Based on	WO 9715673
CA 2235752	C	Based on	WO 9715673
ES 2169269	T3	Based on	EP 858510
JP 3329825	B2	Previous Publ.	JP 200004926
		Based on	WO 9715673

PRIORITY APPLN. INFO: DE 1995-19539952 19951026

REFERENCE PATENTS: 2.Jnl.Ref

## INT. PATENT CLASSIF.:

MAIN: C12N001-20; C12N015-09; C12N015-54

SECONDARY: C07C229-08; C07C323-58; C07H021-04; C07K001-00;  
C12N001-00; C12N001-15; C12N001-19; C12N001-21;  
C12N005-10; C12N009-10; C12N015-00; C12P013-06;  
C12P013-12

INDEX: C12N001-21, C12R001:19; C12N001-21, C12R001:15;  
C12P013-12, C12R001:15

## BASIC ABSTRACT:

DE 19539952 A UPAB: 19970606

Novel mutant serine acetyltransferase proteins, comprise the 273 residue wild type amino acid sequence given in the specification with at least 1 amino acid substitution between residues 97-273 or at least 1 amino acid deletion in the C-terminal region from residue 227, excluding the substitution Met256Ile. Also claimed are: (1) DNA sequence encoding a protein as above; and (2) microorganisms whose cysteine metabolism is deregulated by at least 1 such DNA sequence.

USE - O-acetylserine, L-cysteine or L-cysteine derivatives can be produced by culturing the microorganisms in a nutrient medium, preferably containing a sulphur donor, especially thiosulphate (claimed). L-Cysteine is used in pharmaceuticals to treat bronchial disorders, cosmetics in shampoos and permanent waving lotions and foods as an antioxidant, flavour enhancer and dough processing additive.

ADVANTAGE - The mutant enzymes are less sensitive to L-cysteine inhibition compared with the wild-type enzyme.

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FILE SEGMENT:  
FIELD AVAILABILITY:  
MANUAL CODES:

CPI

AB; DCN

CPI: B04-E02F; B04-F0100E; B04-L0400E; B10-B02D;  
B10-B02J; D01-B01; D03-H01B; D03-H01P; D05-C03D;  
D05-H12B2; D05-H14A; D05-H17B3; D08-B04; D08-B05;  
D08-B11; E10-B02